

Amendments to the Specification

Please replace paragraph [01] with the following rewritten paragraph:

[01] The present application is related to commonly owned (and ~~filed on even date~~) United States Patent Applications: (1) United States Patent Application Serial No. 10/691,200 ~~[[]]~~ entitled "HUE ANGLE CALCULATION SYSTEM AND METHODS" filed October 21, 2003 and now issued as United States Patent No. 6,980,219 B2; (2) United States Patent Application Serial No. 10/691,377 ~~[[]]~~ entitled "METHOD AND APPARATUS FOR CONVERTING FROM SOURCE COLOR SPACE TO RGBW TARGET CENTER COLOR SPACE"; filed October 21, 2003 and published as United States Patent Application Publication 2005/0083341; and (3) United States Patent Application Serial-No. 10/690,716 ~~[[]]~~ entitled "GAMUT CONVERSION SYSTEM AND METHODS", filed October 21, 2003 and published as United States Patent Application Publication 2005/0083344, which are hereby incorporated herein by reference.

Please replace paragraph [02] with the following rewritten paragraph:

[02] In commonly owned United States Patent Applications: (1) United States Patent Application Serial No. 09/916,232 ("the '232 application"), entitled "ARRANGEMENT OF COLOR PIXELS FOR FULL COLOR IMAGING DEVICES WITH SIMPLIFIED ADDRESSING," filed July 25, 2001, now issued as United States Patent 6,903,754; (2) United States Patent Application Serial-No. 10/278,353 ("the '353 application"), entitled "IMPROVEMENTS TO COLOR FLAT PANEL DISPLAY SUB-PIXEL ARRANGEMENTS AND LAYOUTS FOR SUB-PIXEL RENDERING WITH INCREASED MODULATION TRANSFER FUNCTION RESPONSE," filed October 22, 2002, and published as United States Patent Application Publication No. 2003/0128225; (3) United States Patent Application Serial-No. 10/278,352 ("the '352 application"), entitled "IMPROVEMENTS TO COLOR FLAT PANEL DISPLAY SUB-PIXEL ARRANGEMENTS AND LAYOUTS FOR SUB-PIXEL RENDERING WITH

SPLIT BLUE SUB-PIXELS," filed October 22, 2002, and published as United States Patent Application Publication No. 2003/0128179; (4) United States Patent Application Serial-No. 10/243,094 ("the '094 application), entitled "IMPROVED FOUR COLOR ARRANGEMENTS AND EMITTERS FOR SUB-PIXEL RENDERING," filed September 13, 2002, and published as United States Patent Application Publication No. 2004/0051724; (5) United States Patent Application Serial-No. 10/278,328 ("the '328 application"), entitled "IMPROVEMENTS TO COLOR FLAT PANEL DISPLAY SUB-PIXEL ARRANGEMENTS AND LAYOUTS WITH REDUCED BLUE LUMINANCE WELL VISIBILITY," filed October 22, 2002, and published as United States Patent Application Publication No. 2003/0117423; (6) United States Patent Application Serial-No. 10/278,393 ("the '393 application"), entitled "COLOR DISPLAY HAVING HORIZONTAL SUB-PIXEL ARRANGEMENTS AND LAYOUTS," filed October 22, 2002, and published as United States Patent Application Publication No. 2003/0090581; and (7) United States Patent Application Serial-No. [01]10/347,001 ("the '001 application") entitled "IMPROVED SUB-PIXEL ARRANGEMENTS FOR STRIPED DISPLAYS AND METHODS AND SYSTEMS FOR SUB-PIXEL RENDERING SAME," filed January 16, 2003, and published as United States Patent Application Publication No. 2004/0080479, novel sub-pixel arrangements are therein disclosed for improving the cost/performance curves for image display devices and which are herein incorporated by reference.

Please replace paragraph [03] with the following rewritten paragraph:

[03] For certain subpixel repeating groups having an even number of subpixels in a horizontal direction, the following systems and techniques to affect proper dot inversion schemes are disclosed and these applications are herein incorporated by reference: (1) United States Patent Application Serial Number 10/456,839 entitled "IMAGE DEGRADATION CORRECTION IN NOVEL LIQUID CRYSTAL DISPLAYS" and published as United States Patent Application Publication No. 2004/0246280; (2) United States Patent Application Serial No. 10/455,925 entitled "DISPLAY PANEL HAVING CROSSOVER CONNECTIONS EFFECTING DOT INVERSION" and

published as United States Patent Application Publication No. 2004/0246213; (3) United States Patent Application Serial No. 10/455,931 entitled "SYSTEM AND METHOD OF PERFORMING DOT INVERSION WITH STANDARD DRIVERS AND BACKPLANE ON NOVEL DISPLAY PANEL LAYOUTS" and published as United States Patent Application Publication No. 2004/0246381; (4) United States Patent Application Serial No. 10/455,927 entitled "SYSTEM AND METHOD FOR COMPENSATING FOR VISUAL EFFECTS UPON PANELS HAVING FIXED PATTERN NOISE WITH REDUCED QUANTIZATION ERROR" and published as United States Patent Application Publication No. 2004/0246278; (5) United States Patent Application Serial No. 10/456,806 entitled "DOT INVERSION ON NOVEL DISPLAY PANEL LAYOUTS WITH EXTRA DRIVERS" and published as United States Patent Application Publication No. 2004/0246279; and (6) United States Patent Application Serial No. 10/456,838 entitled "LIQUID CRYSTAL DISPLAY BACKPLANE LAYOUTS AND ADDRESSING FOR NON-STANDARD SUBPIXEL ARRANGEMENTS" and published as United States Patent Application Publication No. 2004/0246404.

Please replace paragraph [04] with the following rewritten paragraph:

[04] These improvements are particularly pronounced when coupled with sub-pixel rendering (SPR) systems and methods further disclosed in those applications and in commonly owned United States Patent Applications and patents: (1) United States Patent Application Serial—No. 10/051,612 ("the '612 application"), entitled "CONVERSION OF RGB PIXEL FORMAT DATA TO PENTILE MATRIX SUB-PIXEL DATA FORMAT," filed January 16, 2002, which is published as United States Patent Application Publication No. 2003/0034992, and is now issued as US 7,123,277; (2) United States Patent Application Serial—No. 10/150,355 ("the '355 application"), entitled "METHODS AND SYSTEMS FOR SUB-PIXEL RENDERING WITH GAMMA ADJUSTMENT," filed May 17, 2002, and published as United States Patent Application Publication No. 2003/0103058; (3) United States Patent Application Serial—No. 10/215,843 ("the '843 application"), entitled "METHODS AND SYSTEMS

FOR SUB-PIXEL RENDERING WITH ADAPTIVE FILTERING," filed August 8, 2002 and published as United States Patent Application Publication No. 2003/0085906; (4) United States Patent Application Serial No. 10/379,767 entitled "SYSTEMS AND METHODS FOR TEMPORAL SUB-PIXEL RENDERING OF IMAGE DATA" filed March 4, 2003 and published as United States Patent Application Publication No. 2004/0196302; (5) United States Patent Application Serial No. 10/379,765 entitled "SYSTEMS AND METHODS FOR MOTION ADAPTIVE FILTERING," filed March 4, 2003 and published as United States Patent Application Publication No. 2004/0174380; (6) United States Patent Application Serial No. 10/379,766 entitled "SUB-PIXEL RENDERING SYSTEM AND METHOD FOR IMPROVED DISPLAY VIEWING ANGLES" filed March 4, 2003 and no issued as United States Patent No. 6,917,368; and (7) United States Patent Application Serial No. 10/409,413 entitled "IMAGE DATA SET WITH EMBEDDED PRE-SUBPIXEL RENDERED IMAGE" filed April 7, 2003 and published as United States Patent Application Publication No. 2004/0196297, which are hereby incorporated herein by reference.

Please replace paragraph [033] with the following rewritten paragraph:

[033] The solution to ~~equation 5~~ Equation 6 is a set of Cr, Cg, Cb and Cc values that can be substituted into Equation ~~[[3]] 5~~, which can now convert any 4-primary (R G B C in this case) value into CIE XYZ. The above procedure was demonstrated with a 4-primary system, but this procedure works just as well with any number of primaries. Converting from multi-primary to CIE XYZ is a useful task but what is more useful would be to convert CIE XYZ value into (R G B C) or some other multi-primary system.